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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,601	08/06/2001	Mitsuhiro Nagase	427-45	9635
23117	7590	01/13/2005	EXAMINER	
NIXON & VANDERHYE, PC 1100 N GLEBE ROAD 8TH FLOOR ARLINGTON, VA 22201-4714			HAILU, TADESSE	
			ART UNIT	PAPER NUMBER
			2173	

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application N .</b> 09/921,601	<b>Applicant(s)</b> NAGASE, MITSUHIRO	
	<b>Examiner</b> Tadesse. Hailu	<b>Art Unit</b> 2173	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 September 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 22-25 is/are rejected.
- 7) ☐ Claim(s) 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office Action is in response to the AMENDMENT entered on September 7, 2004 for the patent application (09/921,601).

#### **Priority**

2. The present patent application claims priority from Foreign Application Number P2000-241623 filed 9/8/2000.

#### **Status of the claims**

3. The pending claims 1-25 are examined herein as follows.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6, 8-14, 16-20, 22-23 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Yano Hiroshi (JP410020769A).

With regard to claims 1 and 9:

Yano Hiroshi discloses an information input/output device (e.g., 11, 41, 101, and 171) for visually impaired persons.

The input/output device includes, among other things, a tactile-sense display (a Braille output unit) (e.g., 13, 43, 103, and 173) having a plurality of projectable dotted portions (e.g., 12, 42, 102, and 172) and enabling output of a plurality of braille patterns

by controlling the projection of said dotted portions (e.g., see Fig. 1, also see paragraphs [0019] through [0023]).

The input/output device includes an input means (e.g., see paragraphs 13-14, 23, 31, 41, 53, and 58), the dot pin of the tactile-sense display (e.g., 13, 43, 103, and 173) having a push part, which is operated by a pushing operation fingertip 16 (see Fig. 1, also see paragraphs [0019] through [0023]).

The input/output device also includes a control unit (e.g., 21, 71, and 141) (a recognition means) recognizing the user input via fingertip 16 by pushing dot portion 12 within a setup time (predetermined period of time) also see paragraphs [0019], [0021] [0026] through [0027]).

Yano Hiroshi further discloses that based on detecting the fingertip 16, Braille points are generated or outputted in the location where the fingertip touched, that is, said push part (e.g., 12, 42, 102, and 172) of said tactile-sense display (e.g., 13, 43, 103, and 173) includes said braille output unit (see paragraphs [0013], [0031], and [0041]).

With regard to claims 2 and 10:

Yano Hiroshi further that said tactile-sense display 13 (braille output unit) enables output of braille patterns at a plurality of positions along a transverse direction (see Figs. 1, 4, 5 or 7), which is perpendicular to a direction of projection of said dotted portions (see Figs. 1, 4, 5 or 7, also see paragraph [0029]). For example as illustrated in Fig. 1, each push portion 12 of tactile-sense display 13 is pushed downward (perpendicular to X-axis) for an input.

Yano Hiroshi also disclose said tactile-sense display **13** (braille output unit) comprises a control means **21** of braille pattern (see Fig. 1) with controls the projection of said dotted portions **12** in accordance with the output braille pattern (see paragraph [0023] and [0029]), and further controls the projection of said dotted portions **12** so as to move a braille pattern output by said dotted portions along the transverse direction (see arrangement of the dot portion 12) while maintaining an arrangement of said braille pattern (see paragraph [0023] and [0029]).

With regard to claims 3, 4, 11, and 12:

Again, Yano Hiroshi disclose that based on detecting the fingertip 16, braille points are generated or outputted in the location where the fingertip touched, that is, said push portion **12** of said tactile-sense display **13** includes said respective braille output unit (see paragraph [0013], [0031], and [0041]).

With regard to claims 5 and 13:

The input/output device also includes a control unit (e.g., 21, 71, and 141) (a recognition means) recognizing the user input via fingertip 16 by pushing dot portion 12 within a setup time (predetermined period of time) also see paragraphs [0019], [0021] [0026] through [0027]).

With regard to claims 6, 14 and 23:

The information input/output device for visually impaired users embodied as part of an automatic ticket vending machine (see paragraph 1).

With regard to claims 8,16 and 25:

The information input/output device for visually impaired users embodied as part of (ATM, an automated-teller (a cash dispenser) (see paragraph 1).

With regard to claim 17:

Yano Hiroshi discloses an information input/output device for visually impaired users comprising a user-actuatable input device (e.g., 13, 43, 103, and 173) comprising a braille output surface (e.g., 12, 42, 102, and 172) for outputting braille characters (see paragraphs 1, 2, 13, 14, 23, 31, 41, 53, and 58).

Yano further discloses a processing system (e.g., 21, 71, and 141) for controlling the outputting of the braille characters on the braille output surface and detecting inputs (via finger location detection sensor 47, paragraph 30) in response to actuation of the input (see also paragraphs 31 and 41).

With regard to claim 18:

The information input/output device for visually impaired users further includes a sequence of braille characters in output to the braille output surface (see paragraphs 37-41).

With regard to claim 19:

The information input/output device for visually impaired users further includes the braille output surface (e.g., 13, 43, 103, and 173) comprises opening through which selectively actuated pins (e.g., 12, 42, 102, and 172) extend to form braille characters (see paragraphs 23, 30, etc).

With regard to claim 20:

The information input/output device for visually impaired users further comprising an actuator responsive to signal from the processing system for selectively actuating the pins (see paragraphs 8, 13, 14, 23, 31, 41, and 53).

With regard to claim 22:

The information input/output device for visually impaired users further includes that the user-actuatable input device comprises a press (push) button (see paragraph 23).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7, 15, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yano Hiroshi (JP410020769A) in view of *Admitted Prior Art* (page 1).

While Yano Hiroshi suggested that the information input/output device for visually impaired users could be embodied as various equipment including ATM, automated teller, an automatic-reset machine, an automatic ticket vending machine, and an information retrieval machine. Yano Hiroshi, however, does not mention embodying the information device as fare adjustment machine. But, the *Admitted Prior art* (page 1) describes said fare adjustment machine. Yano Hiroshi and the *Admitted Prior art* are analogous art because they are from the same field of invention, information input/output device for impaired users.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the information input/output device for visually impaired users as a fare adjustment machine as described in the Admitted Prior Art with Yano Hiroshi because visually impaired users could use said fare adjustment machine. Therefore, it would have been obvious to combine Admitted Prior Art with Yano Hiroshi to obtain the invention as specified in claims 7, 15 and 24.

### ***Response to Arguments***

6. Applicant's arguments filed September 7, 2004 have been fully considered but they are not persuasive. Applicant states "JP 10-20769 discloses a braille device that permits a person to change the change that speed at which braille patterns are output." (page 9 of the Remarks). The Applicant further states that "the "tactile-sense display " 13 with dot pins 12 only functions as a braille output device..." (page 9 of the Remarks). The Applicant also states "JP-10-20769 discloses various input devices, none comprises a braille output surface" (page 10 of the Remarks). In contrast to the Applicant's statement, the Examiner believes that JP-10-20769 discloses an input and out put device. As specified in several sections of the disclosure, for example, "detection means detect the contact location of the finger of the Braille-points user who touches a Braille-points actuation side, and a Braille-points repositioning means generates the Braille-points of the above -mentioned Braille-points generation means in the contact location of the finger which this detection means detected." (paragraph 8). As described in paragraph 8 at least in part based on the detected touched/pressed finger input the recognition unit (CPU) outputs or generates the braille points. Thus, "the "tactile-sense



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display " 13 with dot pins 12 functions as a braille input and output device. (similar teaching also found in paragraphs 13, 14, 23, 31, 41, 53 and 58.

The Applicant argues that "there is no disclosure that this tactile-sense display is part of an input means as specified in claim 1." The Examiner disagrees because as specified in several sections of the disclosure (see paragraphs 8, 13, 14, 23, 31, 41, 53 and 58), JP 10-20769 discloses tactile-sense display is part of an input means as specified in claim 1. The Applicant also argues that "there is no description in JP 10-20769 of recognizing an operation concerning the braille pattern output by a braille output when a push part is pushed within a predetermined period of time after the braille pattern are output by the braille output unit as specified in claim 1." Again, the Examiner disagrees because the specified limitation is described in JP 10-20769 (see paragraphs 19, 21, 23, 26 and 27)). The applicant also argues that the limitation of claim 2 is not disclosed in JP 10-20769. The Examiner disagrees because the specified limitation is described in JP 10-20769 (see Figs. 1, 4, 5 or 7, also see paragraph [0029]). The Applicant also argues that "there is no disclosure in JP 10-20769 of recognizing that there is no input when the push part is not pushed within a predetermined period of time after the output of braille patterns as specified in claim 5." The Examiner disagrees because the specified limitation is described in JP 10-20769 (see paragraphs 19, 21, 26 and 27).

***Allowable Subject Matter***

7. Claim 21 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Yano Hiroshi fails to describe that "the actuator comprises a fluid-filled actuating mechanism" as specified in claim 21.

**Conclusion**

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Tadesse Hailu, whose telephone number is (571) 273-4051. The Examiner can normally be reached on M-F from 10:00 - 630 ET. If attempts

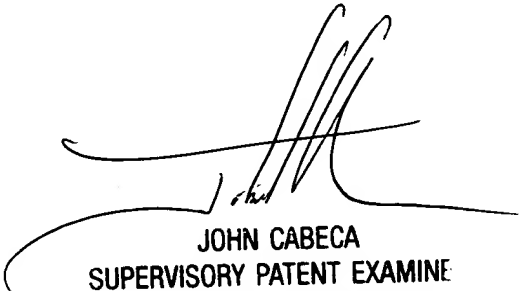
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to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, John Cabeca, can be reached at (571) 273-4048 Art Unit 2173.

10. An inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Tadesse Hailu

12/30/04



JOHN CABECA  
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